ANALOG-TO-DIGITAL CONVERTER METHODS AND STRUCTURES FOR INTERLEAVABLY PROCESSING DATA SIGNALS AND CALIBRATION SIGNALS

ABSTRACT OF THE DISCLOSURE

Methods and structures are provided for the interleaved calibration and subsequent correction of errors in switched-capacitor converter stages of pipelined analog-to-digital converters. The interleaved calibration can be run continuously or at selected times without disturbing the ongoing processing of input data signals. With first and second sets of capacitors, converter stages interleavably process input data signals and input calibration signals. Once these stages have been calibrated with their second sets of capacitors, the first and second sets are exchanged and the converter stages subsequently process input data signals with their second sets of capacitors.